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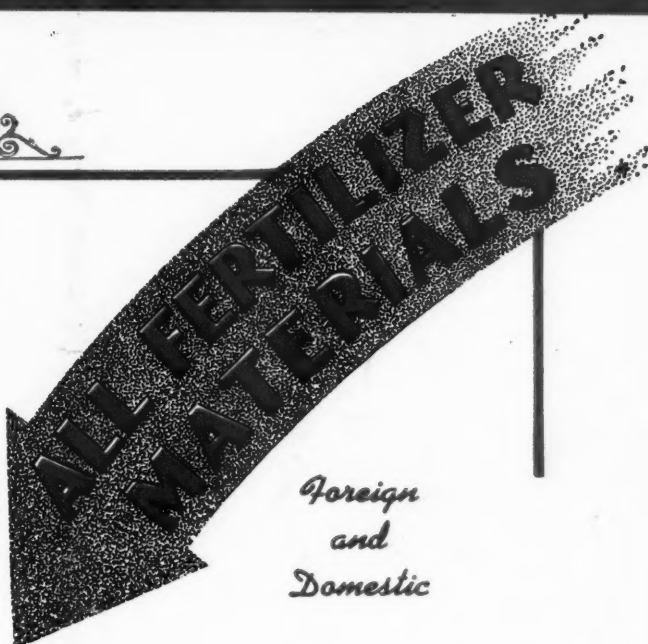


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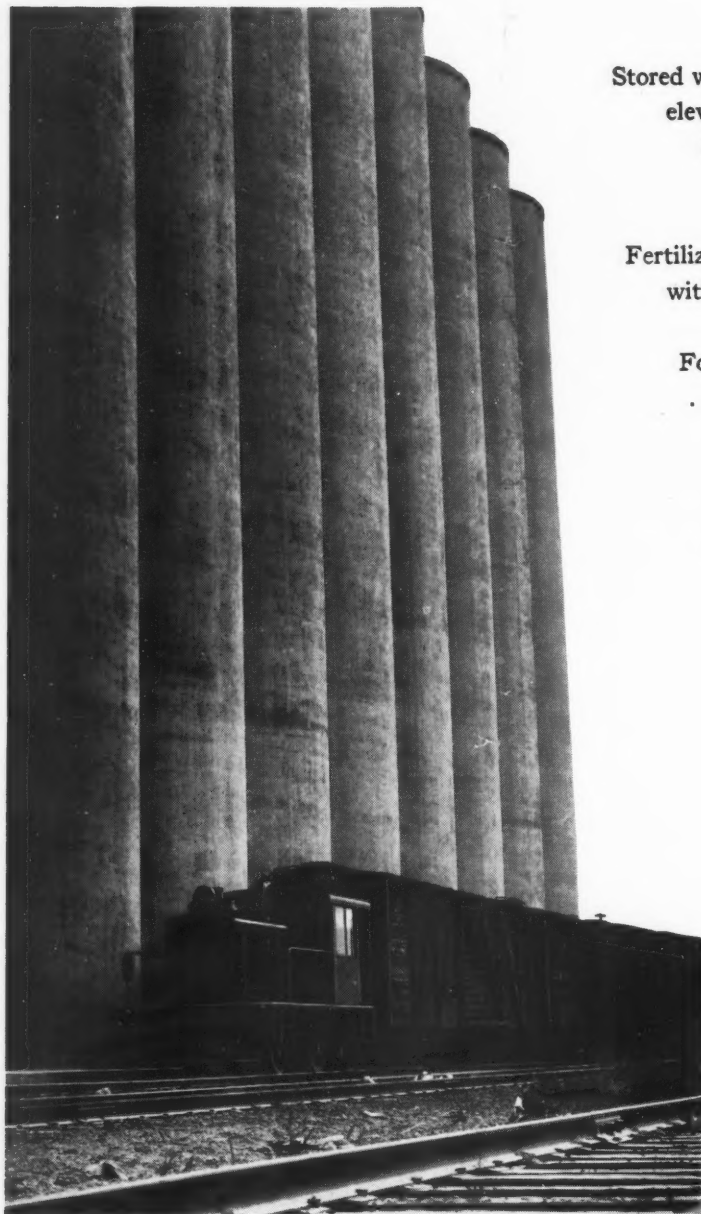
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No. 6

Industry Advisory Committee Reviews Fertilizer Supply Situation

**Production Figures for Current Fertilizer Year Show Moderate Increase in Principal Materials.
Transportation Problems Discussed. Full Utilization of Government Ordinance Plants Urged**

The Fertilizer Industry Advisory Committee met with staff members of the U. S. Department of Agriculture on March 13th in Washington to discuss the current and prospective fertilizer supply situation.

Among those attending the meeting were: W. A. Minor, Assistant to the Secretary of Agriculture, Government presiding officer, and L. B. Taylor, Vice-Government presiding officer. Members of the Committee present were: J. E. Barnes (for Horace M. Albright), Lester E. Britton, George Cushman, J. F. Doetsch, Ralph B. Douglass, Gorge W. Gage, K. D. Morrison. G. W. Moyers (for Franklin Farley), Walter S. Rupp, J. A. Sanford, C. D. Shallenberger, Fred T. Techter, and Fred J. Woods. Other industry members who were present included: G. C. Briggs of Armour Fertilizer Works, Maynard Jenkins and John R. Riley, Jr. of Spencer Chemical Co., A. F. Reed of Lion Oil Co., and J. H. Daughtrigde of E. I. duPont de Nemours Co. The Civilian Production Administration was represented by Wilson T. Hart and Miss Gwen J. Dirks; the State Department by K. L. Anderson and Henry M. Pauley; the Tennessee Valley Authority by Neil Bass; the Department of Agriculture by Roland Crumpler, W. G. Finn, O. S. Fisher, Albert C. Howard, Don Ibach, K. D. Jacob, A. W. Palmer, F. W. Parker, C. R. F. Smith, Wilson

C. Tucker, and W. F. Watkins; the Department of Commerce by C. K. Horner; and Dr. Robert E. Yoder of the Ohio Agricultural Experiment Station represented the agronomists. Dr. John W. Turrentine of the American Potash Institute, Cedric Gran of the American Plant Food Council, and Maurice H. Lockwood, President of the National Fertilizer Association also attended.

Dr. Kenneth D. Jacob of the U. S. D. A. reported on his recent trip with other staff members of the U. S. D. A. to Japan and Korea. Dr. Jacob's statement reviewed the high ratio and relatively large usage of nitrogen in pre-war practice of Japan and showed a chart illustrating the decrease in supplies and use of fertilizer during the war. Dr. Jacob indicated that gradually industry units in Japan made up largely of synthetic sulphate of ammonia production facilities and superphosphate processing facilities are being rehabilitated but pointed out that it would be some time before Japan would be self-sufficient in such operations due to war damage and the difficulties of re-equipping and getting such units back into full production.

Representatives of the Civilian Production Administration presented reports on the present supply situation for nitrogen, phosphates, and potash. The figures presented are

given in Tables I, II, III and IV, and need little amplification with one exception. That exception is the table on the revised nitrogen estimate (Table I). In this table CPA indicated that 1946-47 revised estimate for domestic sulphate of ammonia production should be increased 600 tons. James F. Doetsch of the Chilean Nitrate Sales Corp. indicated that the figure of 96,000 tons of nitrogen for Chilean nitrate is larger than they can hope to accomplish this year. Mr.

Doetsch suggested that 90,000 tons of nitrogen would be nearer right and stated that the application of stocks on hand at the beginning of the year plus imports that can be safely counted on total 550,000 short tons of material (which is equivalent to 88,000 tons of nitrogen). Some members of the Advisory Committee expressed doubt concerning the possibility of some of the fixation plants being able to produce additional nitrogen as indicated in the footnote of the nitrogen table.

TABLE I.
Revised Estimate of Nitrogenous Fertilizer Materials
Short Tons of "N"

Released by CPA—March 13, 1947

		1945 July-Dec. Actual	1946 July-Dec. Actual	1946-47 Previous Estimate	1946-47 Revised Estimate
Ammonium Sulphate	U. S. Production	83,940	95,971	143,500 ¹	144,100 ¹
	Imports (Canada)	13,619	6,703	23,500	23,500
Ammonium Nitrate	U. S. Production	55,916	80,802	159,500 ²	159,500 ²
	Imports (Canada)	20,612	24,799	38,000	38,000
Other Solid Nitrogenous Material	U. S. Production	38,737	30,228	26,400	39,200
	Imports (CaCN ₂ , 11-48 16-20-Canada CaNO ₂ -Norway)	22,371	24,979	42,300	42,300
Chile Nitrate	Imports	40,170	15,992	96,800	96,800
Solutions	U. S. Production	76,630	97,548	200,000	220,200 ³
Organics	U. S. Production	15,000	15,000	30,000	30,000
<i>Totals</i>		366,995	391,302	760,000 ¹	793,600 ¹
<i>Exports</i>			-42,000*	-67,000	-67,000
			349,302	693,000	726,600

¹ This figure could be increased by 20,000 tons at least, if no strikes could be anticipated through June, 1947, in coal or steel.

² Revised by adding 90% of Sterlington's expected production first six months of 1947. Expect 22,500 and expect 90% for Agriculture or 20,200 tons.

³ Does not include Army production.

* Includes Army borrowing of 33,000 tons.

NOTE: No effect of Lake Charles—Mathieson reports may start in May.

TABLE II.
Superphosphate Program, 1946-47
Prepared March 10, 1947
(Figures in short tons P₂O₅)

<i>Estimated Production</i>	1,557,091
Export Commitments:	
Canada.....	24,471
Iceland.....	216
Kenya.....	521
Philippine Islands.....	1,815
British West Indies.....	712
Albania.....	353
China.....	5,512
Latin America.....	20,944
<i>Total Exports</i>	54,544
Domestic Production Available for United States	
Agriculture and Possessions.....	1,502,547
<i>Total</i>	1,557,091
<i>Available for U. S. Agriculture and Possessions:</i>	
From Domestic Production.....	1,502,547
Imports from Canada.....	27,339
<i>Total</i>	1,529,886

An industry spokesman said (1) Three of each four ships leaving Chile are bound for the U. S. with nitrate of soda; (2) Two cargoes have come in recently, four are on the way, four are loading and ships are being "pushed" at Chile slightly faster than the scheduled loading rate; (3) At U. S. ports cargoes are being moved from ships through bagging into cars and on the way, by-passing any warehousing; (4) One port moved 1,800 tons this way one recent day.

Production figures for phosphate indicated that 116,000 tons more of phosphoric acid as superphosphates were produced during 1946 than during 1945, and that concentrated superphosphate production reached a new all-time high in 1946 as also did ordinary

superphosphate production. Exports of superphosphate were indicated as only 54,544 tons in terms of phosphoric acid, mainly to Canada and Latin America. With an estimated 1946-47 superphosphate production of 1,557,091 tons in terms of phosphoric acid, the relatively small export leaves a balance available for U. S. agriculture and possessions of 1,502,547 tons of P_2O_5 . With imports from Canada of 27,339 tons, the total available for U. S. agriculture and possessions appears for this year to be 1,529,886 tons expressed as phosphoric acid.

With the possibility of imports of potash from France of 16,500 tons of K_2O and estimated 1946-47 supply from domestic

(Continued on page 28)

TABLE III.
Production of Soluble Phosphates
(Prepared by CPA—March 10, 1947)
(Figures in short tons)

Year	(1) Concentrated Phosphatic Ma- terial (Basis 45% P_2O_5)	(2) Wet Base 18% P_2O_5	(3) Normal Super- phosphate 18% P_2O_5	(4) *Total Super- phosphate 18% P_2O_5	(5) **Total Normal and Concentrated Phosphatic Material P_2O_5 Equivalent
1937	166,144	109,048	3,945,591	4,054,639	804,600
1938	186,920	139,314	3,188,386	3,327,700	683,100
1939	272,750	135,554	3,392,568	3,528,122	757,800
1940	329,046	121,069	3,921,314	4,042,383	875,700
1941	317,990			4,510,022	954,900
1942	314,430			5,163,922	1,071,000
1943	289,078	90,734	6,280,528	6,371,262	1,276,913
1944	279,960	48,357	6,694,070	6,742,427	1,339,618
1945	262,737	37,962	7,436,023	7,473,985	1,463,996
1946	374,913	47,985	7,791,047	7,839,032	1,579,737

* Columns 2 and 3 equal Column 4

**Columns 1 and 4 equal Column 5.

TABLE IV
Potash Situation
Reported by CPA—March 13, 1947
Short Tons K_2O

	<i>Agriculture</i>		<i>Estimated 1946-47</i>
	1944-45	1945-46	
Continental U. S.—Agriculture.....	692,406	741,855	748,360
Puerto Rico.....	18,711	18,642	21,635
Hawaii.....	9,513	12,092	11,032
<i>Totals</i>	720,630	772,589	781,027*
	<i>Industrial and Exports</i>		
	1944-45	1945-46	
Continental U. S.—Industrial.....	88,537	74,436	76,000
Canada Total.....	43,768	45,521	41,060
Exports (other than Canada).....	11,012	16,421	16,913
<i>Totals</i>	143,317	136,378	133,913
<i>GRAND TOTALS</i>	863,947	908,967	914,940

* Additional Imports (France)—(March, April, May)..... 16,500

931,440

February Tax Tag Sales

Fertilizer tax tag sales in 16 States for July-February of the current fiscal year, based on reports of State control officials to The National Fertilizer Association, reached a new all-time high. Tag sales during this period, in equivalent tons, amounted to 5,996,000 short tons; this represents increases of 15.7 per cent over 1946 and 30.7 over 1945.

Tag sales for the 11 Southern States were 13.5 per cent higher than for 1945-46. Louisiana was the only Southern State that did not have an increase over the previous year. The other ten States showed increases ranging from very slight to more than twice as much as the year before. Georgia and Florida had increases of less than 1 per cent while Oklahoma reported an increase of 136 per cent.

Sales in the Midwestern States increased 25.1 per cent, with all five States reporting increases. The rise over last year ranged from 17.2 per cent for Indiana to 125.9 per cent for Kansas.

January-February Tag Sales Below Last Year

Fertilizer tag sales for January-February in 16 States were equivalent to 2,660,000 short tons. This was 4 per cent lower than for 1946, but 9.9 per cent higher than for 1945. Generally, the decreases were in the States that normally report large tonnages.

Sales in the Southern States totaled 2,238,000 tons, a decrease of 5 per cent from a year

ago. Sales in Arkansas and Oklahoma increased substantially over 1946, Georgia and Texas reported slight increases, while the remaining seven States showed decreases ranging from 1 per cent for Virginia to 35 per cent for Tennessee.

Sales in the Midwestern States, on the other hand, were 8 per cent higher than in the previous year, with only Missouri failing to register an increase.

Decline in February Tag Sales in South

The decline in the January-February reported sales was due to marked decreases in February sales in many of the Southern States. February tag sales for the Southern States were 82 per cent of the total for February 1946, but sales in the Midwestern States were 36 per cent higher than a year ago. Of the 11 reporting Southern States, only Arkansas, Texas, and Oklahoma recorded increases over the previous February while the remaining eight States registered decreases of 12 to 38 per cent. Sales in all five of the Midwestern States increased over the previous year. It is interesting to note that February sales in the South accounted for 85 per cent of total February sales in 1947 and 91 per cent in 1946.

Total tag sales reported for December, as well as for January, were substantially larger than a year earlier. It is possible that the decline in February indicates earlier buying of tags this year rather than a decline in actual fertilizer sales.

FERTILIZER TAX TAG SALES
COMPILED BY THE NATIONAL FERTILIZER ASSOCIATION
FEBRUARY JANUARY-FEBRUARY

STATE	1947 Tons	1946 Tons	1945 Tons	% of 1946	1947 Tons	1946 Tons	1945 Tons
Virginia.....	71,736	86,517	69,379	99	165,350	167,227	147,056
N. Carolina.....	259,504	304,396	267,507	97	581,722	598,361	529,922
S. Carolina.....	130,270	171,320	147,430	98	325,165	331,209	309,048
Georgia.....	214,800	244,561	208,810	100	415,390	414,204	386,705
Florida.....	70,703	106,574	78,572	70	167,936	238,728	201,292
Alabama.....	120,150	193,150	147,250	91	287,350	316,450	307,000
Tennessee.....	38,475	57,919	44,791	65	53,958	83,371	66,375
Arkansas.....	39,200	27,600	11,200	156	64,800	41,500	48,400
Louisiana.....	28,980	38,900	21,550	77	51,630	67,360	62,811
Texas.....	55,765	40,625	19,770	107	98,839	92,287	64,380
Oklahoma.....	12,550	6,850	4,020	180	25,900	14,350	8,062
<i>Total South.....</i>	<i>1,042,133</i>	<i>1,278,412</i>	<i>1,020,279</i>	<i>95</i>	<i>2,238,040</i>	<i>2,365,047</i>	<i>2,131,051</i>
Indiana.....	46,527	39,753	39,506	103	127,114	122,976	83,056
Illinois.....	40,000	29,283	38,100	121	95,950	79,433	59,075
Kentucky.....	49,000	38,513	37,263	111	116,253	105,083	88,393
Missouri.....	36,285	20,532	20,481	86	63,175	73,619	47,509
Kansas.....	10,810	5,931	4,900	187	19,598	10,481	12,205
<i>Total Midwest.....</i>	<i>182,622</i>	<i>134,012</i>	<i>140,250</i>	<i>108</i>	<i>422,090</i>	<i>391,592</i>	<i>290,238</i>
<i>Grand Total.....</i>	<i>1,224,755</i>	<i>1,412,424</i>	<i>1,160,529</i>	<i>96</i>	<i>2,660,130</i>	<i>2,756,639</i>	<i>2,421,289</i>

International Nitrogen Allocation To Continue. Phosphate and Potash To Be Dropped

The International Emergency Food Council stated on March 12th that allocation recommendations for distribution of the world supply of nitrogenous fertilizers will be continued in the fertilizer year commencing July 1, 1947.

Effective July 1, 1947, all other fertilizer materials will be withdrawn from the list of reserved commodities on which allocation recommendations are made. Previously new supplies of phosphate rock becoming available after January 1, 1947, had been withdrawn from the reserved list. The current action takes potash and soluble phosphates off this list after July 1, 1947.

The Committee on Fertilizers reported that a critical world shortage of nitrogenous fertilizers will continue through 1947-48. In an analysis last December of the world fertilizer outlook, the Committee reported a world shortage for the present year of at least 761,000 tons of nitrogen (equivalent to 3,805,000 metric tons of ammonium sulphate). Present indications are that the shortage may be even larger, since production has been cut more severely than anticipated by lack of coal and transport in various producing areas.

The Committee found that world production of soluble phosphates will be approximately in balance with world requirements in 1947-48, although some areas such as Austria and Germany may still find difficulty in meeting their requirements.

The position of potash is less clear. Information is lacking on the probable supply for export from the Russian zone of Occupied Germany and from Spain. However, if exports from these sources reach pre-war levels during the coming fertilizer year, world supplies could be sufficient to meet most requirements.

Although the Committee recommended that allocation work on phosphates and potash be terminated with the end of the present fertilizer year, it foresaw the possibility that problems of world supply and demand may arise during the year for these commodities which are highly important in world food production. It therefore appointed a working party to examine and report on what statistics concerning these commodities should be collected and analyzed as a basis for international cooperation in solution of such

problems as do arise, and by whom this work might best be done.

The Committee's sub-group on nitrogenous fertilizers is starting at once to gather information on probable supplies and requirements for the year beginning July 1, 1947, as the first step in developing a recommended allocation.

Gregg Named Manager of Bemis Seattle Factory

Bemis Bro. Bag Company announced the promotion of E. J. Gregg from Assistant Manager to Manager of their Seattle factory. He replaces R. D. McAusland, Pacific Coast General Manager, who was made Vice-President of the Company at a meeting of the Board of Directors on February 7th in St. Louis.

Joining the Bemis organization at their Seattle plant in 1911, Mr. Gregg has served continuously with the exception of time spent in the Navy during World War I. He was advanced from the Sales Department to the position of Assistant Manager in 1941.

American Potash Plans New Borax Plant

The American Potash and Chemical Corporation has announced plans for the extension of their manufacturing facilities at Trona, California. In addition to an expansion of their power plant, a new plant for the increased production of borax and soda ash will be built. The new construction is expected to cost about \$6,000,000.

Chase Bag Transfers Trigg

From the General Sales Office in Chicago it has been announced by R. N. Connors, Vice-President and General Sales Manager of Chase Bag Company, that J. B. Trigg, Company Salesman representing the Portland, Oregon Branch since 1939, has been transferred to the Dallas Sales Office.

Mr. Trigg, a graduate of Grinnell College, served in the Army Air Forces as a Major during the war. He has gained broad and valuable experience in the flour, feed and produce industries while representing the Chase Bag Company in the Washington-Oregon territory. Serving the Dallas-Ft. Worth area, Mr. Trigg will make his headquarters in Dallas.

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Again the Flannagan Bill

Representative John W. Flannagan, Jr., (Virginia) on March 11, introduced into the House of Representatives H. R. 2494, a bill to provide, among other things, for "the establishment of a national soil fertility policy and program."

Title I contains a number of findings relative to soil depletion, fertilizers, and nutritional value of foods, evidently intended to enlist popular sympathy with the bill, and a statement of policy for the U. S. Government and provides for the formation of a national soil fertility program, ostensibly to restore and maintain the Nation's soil resources.

Title II provides for establishment of a national test-demonstration program, under which concentrated mineral fertilizers would be supplied to not more than 2 per cent of the farms of each State. The Federal aspects of this program would be administered through the Secretary of Agriculture, except in the Tennessee Valley watershed, which would remain under control of TVA. State and local administration of the program would be conducted by the land-grant colleges in cooperation with farmers and farmer organizations, participation by county agricultural agents being specifically mentioned.

In connection with the general planning and carrying out of this program a State advisory committee for each State and a National Soil Fertilizer Policy Committee would be set up.

The State advisory committee of five members would be appointed by the President of the land-grant college and would consist of two farmers, one representative of State farmer cooperative organizations, one representative of organizations engaged in the business of producing, processing or distributing fertilizers, and the Director of the agricultural experiment station.

The national committee would consist of 12 farmers and 3 ex-officio members. One of the 12 farmer members would be selected by the State chairman in each of the 12 Federal land-bank districts.

Title III Specifically directs TVA to construct its projected phosphate plant at Mobile, Alabama, to acquire reserves of phosphate rock properties in Florida for use by that plant and such other plants as may be constructed and operated under

the provisions of the Act. The products of the Mobile plant would be disposed of partly for use in the test-demonstration program and partly in accordance with the TVA Act of 1933. TVA would be required to make recommendations to Congress for disposal of the plant within five years, and Congress would have an opportunity to disapprove the recommendations.

The Secretary of Agriculture would be authorized to make loans to farmer cooperatives for financing the acquisition, construction and operation of plants for the manufacture and distribution of fertilizers.

Title IV would require the Secretary of the Interior to include, in future leases for extraction of phosphate or potassic minerals requirements for the sale of a percentage of the production for use in carrying out the national fertilizer program and contains other provisions for facilitating the acquisition of materials for the program.

Changes from Previous Bill

Except in a few minor instances, the bill is similar to those introduced in the past by Representative Flannagan on behalf of the Farm Bureau. It differs largely from the earlier proposals in that specific authority is given only for the construction of a mobile plant by the government, whereas previously it was also proposed to construct a plant to exploit the western phosphate deposits, and in the demonstration program to show farmers the value of fertilizers to agriculture. Instead of the provision for seventy-five demonstration farms in every county, the bill now provides that sufficient concentrated mineral fertilizers be supplied by the government to not more than 2 per cent of the farms in each state.

A new wrinkle in legislative policy is also written into the provisions of the bill providing for the appointment of state advisory committees. The bill says that members shall be selected to provide the director of extension with assistance and advice from persons adequately representing the general public interest within each state "and who profess a belief in the wisdom and feasibility of this program."

The bill has been referred to the House Committee on Agriculture, who will probably hold hearings at some future date. Members of the industry should write to the chairman of this Committee, Hon. Clifford R. Hope, and express their views on this proposed legislation.

Payment Discontinued on Cotton Insurance Loss Claims

Secretary of Agriculture Clinton P. Anderson announced on March 11th that the Federal Crop Insurance Corporation is notifying its field offices to discontinue payment of 1946 crop cotton loss claims under the crop insurance program.

This action, which is taken at the direction of Secretary Anderson and is effective immediately, is necessary because funds available for paying claims under this part of the general crop insurance program have been exhausted. Cotton loss claims on 1946 production have run far beyond any preliminary estimate. Premiums earned for 1946 crop cotton insurance ran to about 42 million pounds, while total loss claims are estimated at three or four times this amount.

Legislative provisions under which crop insurance is operated require that insurance be made available to all cotton producers. Officials of the Department point out, however, that under the present circumstances cotton loss payments cannot be continued until additional funds are appropriated.

The action on cotton does not affect loss payments for other insured crops (wheat, flax, corn and tobacco). Payment of approved loss claims will be continued for these commodities. Premiums collected for this group in the insurance program are said to be adequate to meet all loss claims.

It is estimated that more than half of the total 1946 crop cotton loss claims have already been paid. Even though further payments have been discontinued, field offices of the Crop Insurance Corporation will continue to adjust, accept and process additional claims under the program.

A thorough investigation of the whole question of cotton loss claims, particularly in the areas of heaviest reported losses, will be undertaken at once under the immediate direction of Secretary Anderson. Although it is recognized that 1946 cotton production was below normal, the investigation will cover reasons for the very high number of loss claims in some areas, and the amount of losses claimed.

Secretary Anderson has asked Ralph S. Trigg, Deputy Administrator of the Production and Marketing Administration, to organize a special investigation group and to assume personal supervision of this group in the field during the immediate investigation of all angles of the cotton insurance situation.

Nitrogenous Fertilizers for Rice

By R. H. Wyche, Superintendent,
Substation No. 4, Beaumont, Texas

Nitrogen fertilizers have consistently increased the yields of rice on soils that have been planted to this crop at regular intervals over a period of years at the Rice Experiment Station at Beaumont and in cooperative experiments with rice growers.

In order to secure maximum efficiency from the use of nitrogen fertilizers, experiments have been conducted at the Beaumont station for the past three years (1944, 1945, and 1946) to determine the optimum time and rate of application. In these experiments, both cyanamid and sulphate of ammonia were applied at different dates during the growing season to the Bluebonnet variety of rice. The results of these tests are shown in Table I.

TABLE I.

YIELDS OF RICE OBTAINED FROM NITROGEN FERTILIZERS APPLIED AT DIFFERENT DATES

Time of application of fertilizer	Average yield in pounds per acre
At time of seeding.....	2,946
At approximately 3 weeks after seeding (just prior to first irrigation).....	2,860
At approximately 6 weeks after seeding (just prior to second irrigation)....	2,783
No fertilizer added (check).	2,329

The largest average yield of 2,946 pounds resulted from applications made at the time of seeding. Although fertilizer should be applied at seeding time, if possible, it is significant to note that satisfactory increases in yield were obtained from the later applica-

tions. Where farmers experience great difficulty in getting rice acreage planted during extremely wet planting seasons, these data indicate that good results may be obtained where applications of fertilizers are delayed as much as six weeks after planting. Observations from this and other tests on the Beaumont station indicate that in making delayed applications it is not advisable to apply fertilizer in the water and in the use of cyanamid, this material should not be placed in contact with the seed, or on seedling rice which is damp with dew.

The results of the tests involved different rates of application of nitrogen fertilizer show that the heavier rates are the most profitable and indicate that yields are influenced more by amounts of fertilizers than by time of application. The results of these tests are shown in Table II.

TABLE II.

YIELDS OF RICE OBTAINED FROM NITROGEN FERTILIZER APPLIED AT DIFFERENT RATES

Nitrogen fertilizer	Rate, lbs. per acre	Average yield, lbs. per acre	Profit* per acre
Check (no nitrogen).		2,329	
Cyanamid.....	100	2,631	\$12.10
Cyanamid.....	200	2,813	18.20
Cyanamid.....	300	3,110	30.05
Sulphate of Ammonia.....	200	2,899	22.50

* Rice was valued at \$18.10 a barrel of 162 pounds, and fertilizer at \$60 a ton.

The results from tests conducted at Beaumont over the past three years show that the use of nitrogen fertilizer on rice grown on so-called old rice land is most profitable when heavy applications of 300 pounds are made at the time of seeding.

BRADLEY & BAKER

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504 Merchants Exchange Bldg., St. Louis, Mo.

FERTILIZER MATERIALS MARKET

NEW YORK

Market Continues Firm. Feed Trade Interest Raises Organics Prices from Previous Decline. International Allocations To Be Removed on Phosphates and Potash. New Potash Prices f.o.b. Mine Announced by Two Companies

Exclusive Correspondence to "The American Fertilizer"

NEW YORK, March 17, 1947.

The fertilizer materials markets continue to hold very firm at established prices. Organics, which had shown some weakness during recent weeks, have returned to previous high quotations due to increased interest on the part of the feed trade. Stocks of all basic fertilizer ingredients remain considerably short of current demand.

The International Emergency Food Council has announced from Washington that phosphate and potash allocations will be removed July 1st, but that allocations for distribution of nitrogenous fertilizers throughout the world will be continued during the 1947-48 fertilizer year.

Export inquiry has become more active during the past reporting period, but shipments accomplished to foreign markets have been limited.

Sulphate of Ammonia

Production continues to improve, but cannot begin to take care of current demand. The movement of this material from producing points is being retarded by the shortage of boxcars.

Nitrate of Soda

Domestic production continues to be held back by the shortage of soda ash, but increased quotas from Chile will reach this market in the near future as a result of government assistance.

Organic Materials

Such items as dried blood, tankage and bone meal are back to levels beyond the reach of fertilizer manufacturers. Recent buying in the feed trade has reduced available supplies of these materials and offerings are extremely limited in this area.

Superphosphate

This market remains very tight with producers unable to build up stocks because of heavy call from fertilizer mixers. Demand

for triple superphosphate remains far above production capacity.

Potash

Movement from the mines to fertilizer manufacturers continues in record volume. All anticipated production for the April-May period has been committed, but much of the interest will be unsatisfied. A price basis for muriate of 40 cents per unit f.o.b. mine has recently been established by two major producers. This price applies only to April-May commitments.

CHARLESTON

All Materials Far Short of Demand. Some Price Increases Reported. Car Shortage Still Hampers Superphosphate

Exclusive Correspondence to "The American Fertilizer"

CHARLESTON, March 15, 1947.

"The big three" in materials, nitrogen, superphosphate and potash, remain far short of demand but farmers probably will get more fertilizer this season than during any previous fertilizer year. In spite of car shortages, machinery shortages, labor and raw material shortages, production of mixed goods is expected to reach a new high.

Organics.—Interest has increased in organics recently as the market has advanced on vegetable meals after several months of declining prices. Prompt 9% cottonseed meal is quoted at about \$74.00 delivered eastern points in bags. Some mills are sold up on cottonseed meal, and soybean and peanut meals have strengthened. This strength gains much support from the rise in wheat prices.

Castor Pomace.—Market is quiet and little new business is reported.

Hoof Meal.—A few offerings have been made recently at prices ranging from about \$7.80 to \$9.25 per unit ammonia (\$9.60 to \$11.24 per unit N) c.i.f.

Blood.—Chicago quotes around \$8.50 (\$10.33 per unit N) in carload lots and South

American material in bags has been recently offered at around \$8.65 (\$10.51 per unit N). c.i.f. Producers are pretty well sold up at present.

Tankage.—Wet rendered tankage is quoted around \$8.50 (\$10.33 per unit N) f.o.b. Chicago.

Nitrate of Soda.—Some supplies are coming in from Chile but in insufficient quantities to meet the tremendous demand. Much will arrive too late for maximum use this season. Domestic production remains curtailed due to shortage of soda ash.

Ammonium Nitrate.—Deliveries of ammonium nitrate are running from two to four weeks behind schedule and demand far exceeds available supplies. Price remains firm at \$46.00 f.o.b. Sheffield, Alabama for buyers in the Southeast.

Sulphate of Ammonia.—Market is tight as supply fails to meet the tremendous demand for this mineral nitrogen. One producer is reported to have advanced his export price to \$34.00 f.o.b. oven—a \$2.00 increase. Domestic prices remain \$30.00 to \$32.00 per ton bulk at the oven for Eastern buyers, but a few more producers have recently joined others in pricing at \$32.00 instead of \$30.00.

Potash.—Supply is exceedingly short of demand. One major producer has changed his method of pricing to the f.o.b. production point basis and will no longer quote on the ex-vessel basis. For the period April 1st to May 15, 1947, prices will be 40 cents per unit K_2O for 60% muriate, f.o.b. mine, and 20 cents per unit K_2O for manure salts, f.o.b. mine.

Superphosphate.—Stocks are low and production curtailed by car shortage for delivery of phosphate rock, and by inadequate supplies of sulphuric acid. Demand is tremendous.

Phosphate Rock.—Main bottleneck is car shortage in making deliveries to consumers.

Mechanical parts for repair work at the mines also have been short, causing delays in production. Market is tight and prices are firm. With prospect of increased cost of oil, the price of rock will probably be higher later as a result.

PHILADELPHIA

Material Shortage Critical. Some Mixers Out of Materials. Organics Prices Rising. Transportation Troubles Continue

Exclusive Correspondence to "The American Fertilizer"

PHILADELPHIA, March 17, 1947.

The need by buyers for fertilizer chemicals is very serious and some plants have quit mixing for lack of materials. Others are increasing their purchases of organics at advanced prices.

Sulphate of Ammonia.—While production seems to be on a fairly high level, the demand is much greater than the capacity to supply and shipments are not being made on time. Delays as long as three weeks are reported. Much of this delay is attributed to box car shortage. No offerings, new or resale, are reported.

Nitrate of Soda.—Stocks still remain below requirements. Shipments from Chile had been delayed by labor difficulties, but they are now coming through more freely, and more vessels have been put into this service. Domestic production is still hampered by lack of raw materials.

Castor Pomace.—There have been a few sales by the producers, and several offerings of resale—the latter at rather high prices.

Blood, Bone, Tankage.—The supply of bone meal recently seemed much easier, with producers rather reluctantly accepting lower prices. There is no great surplus, however, as the feeding trade is again in the market. Blood after dipping to \$8.00 per



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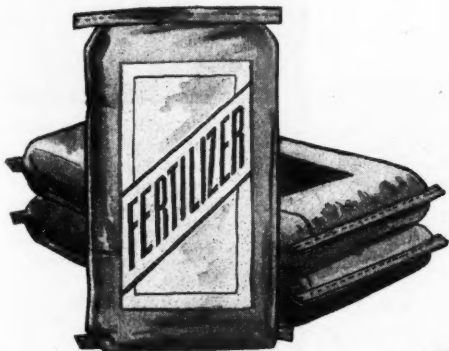
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Specify Raymond Shipping Sacks for your packing and shipping needs.

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THE RAYMOND BAG COMPANY
Middletown, Ohio

RAYMOND Multi-Wall PAPER SACKS

unit of ammonia (\$9.72 per unit N), and tankage to \$7.00 (\$8.51 per unit N)—and lower, have gotten very much stronger. Blood was being quoted at \$9.50 (\$11.55 per unit N) and tankage proportionately higher. Stocks were said to have been cleaned out over the week-end. Oil cake meals advanced \$5.00 to \$6.00 per ton in all markets.

Fish Scrap.—Bids are being solicited for the new catch, but buyers seem in no hurry to commit themselves just yet.

Phosphate Rock.—Demand is exceedingly strong, but supply is deficient due to mechanical difficulties hampering full production, and car shortage hindering shipment.

Superphosphate.—Stocks are short of requirements and market position continues very tight. Producers have difficulty in procuring raw material.

Potash.—Demand is far ahead of the current supply and mixers are using other forms than the usual muriate and sulphate. In fact, several carloads of "drug store-USP" material have gone into fertilizers, and at drug store prices.

CHICAGO

Little Fertilizer Organic Material on Market.
Feed Prices Advancing

Exclusive Correspondence to "The American Fertilizer"

CHICAGO, March 15, 1947.

Excepting for a comparatively small quantity of nitrogenous recently on the market, no change can be noted in the organic offering situation. While there was some price resistance for nitrogenous in certain sections, in other parts of the south seller's price was paid without question and additional sought.

Prices of animal feeds have advanced owing to the increased demand and shortage of supplies.

Nitrate Ships to Continue Operation

The use of U. S. Maritime Commission ships in the emergency transportation of nitrate of soda from Chile will be continued until the end of the fertilizer season on June 30th.

Authority of the Commission to operate the vessels would have expired by law on February 28th but an act of Congress, signed by President Truman, extended the period. The commission has 15 ships engaged in the movement of Chilean nitrate.

CASE HISTORY No. 13

One in a series of factual experiences of a group of American manufacturers with Multi-wall Paper Bags.

COST COMPARISON (Per Ton)



FABRIC BAG



PAPER BAGS

SAVINGS

CLASS OF PRODUCT PACKED

CEMENT	FERTILIZER
CHEMICALS	FOOD
FIRESTUFFS	MISCELLANEOUS

PRODUCT CHARACTERISTICS

ABRASIVE	GRANULAR
CORROSIVE	HEAVY
DELICUESCENT	HYGROSCOPIC
FLUFFY	LIGHT
FREE-FLOWING	VISCOUS

ST. REGIS PACKAGING SYSTEMS

are designed to meet a wide range of product requirements and plant layouts. Packers are available in a variety of sizes and types, with filling speeds as high as twenty-four 100-lb. bags per minute—with one operator. Nearly 400 commodities—rock products, fertilizers, chemicals, foods, and feeds—are now being packaged in sturdy, low-cost multiwall paper bags.

Accent on Sanitation

PAYS DOUBLE DIVIDENDS

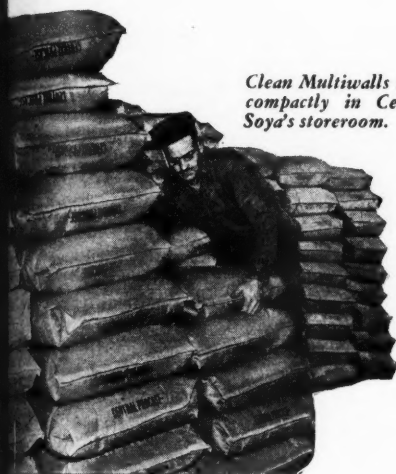
To the Central Soya Company, Inc., a sanitary package is a vital factor in the sale of its soya flour—one of the many soybean products made in one of the company's three Mid-Western plants.

This company, whose executive offices are in Fort Wayne, Indiana, formerly packed its flour in fabric bags. Recently it adopted a St. Regis Packaging System consisting of four 100-LS bag-filling machines and multiwall paper valve bags. Clean, fresh-looking Multiwalls won immediate approval from customers. They commented that these dust-free containers assured more effective protection against contamination and infestation. Untouched by human hands, Central

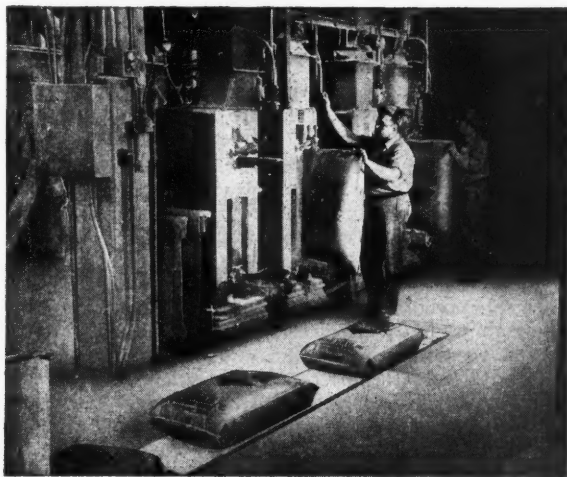
Soya's flour today enjoys an enviable reputation for cleanliness.

In addition to better sanitary protection, the new system paid an extra dividend in the form of important economies in containers, labor costs, and in unit packaging costs, as shown graphically on the page at the left.

Thus, the company achieved two important objectives—more sanitary packaging and a substantial saving in costs. The savings alone, typical of economies provided by St. Regis systems, explain why manufacturers in many industries have adopted this modern packaging method. Mail the coupon for the complete picture story of this efficient, economical operation.



Clean Multiwalls stack compactly in Central Soya's storeroom.



Multiwalls are filled by this battery of four 100-LS packers, then placed on the floor-level conveyor for movement directly to box-cars or storage room.

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Without obligation, please send me full details regarding "Case History" No. 13, outlined above.

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COMPANY _____

ADDRESS _____

State Fertilizer Legislation

The National Fertilizer Association has published a summary of the fertilizer bills which have been presented to the various state legislatures which are now in session.

Arizona. Senate Bill 101. Covers agricultural minerals and designates them as substances added to the soil for purposes other than as a direct source of plant food.

Idaho. House Bill 99 proposes to amend the fertilizer control law by requiring samples to be analyzed by a "qualified" chemist. Bill passed and signed by the governor.

Missouri. House Bill 141. Requires any vehicle carrying limestone, garbage, fertilizer or several other materials to be completely covered with a canvas, wood or metal cover.

Montana. House Bill 94 proposes to amend the fertilizer control law by exempting "activated sludge that has been heated and is sterile" from the provisions of the law and by requiring each registrant to file statements of the amount of each brand sold in the first six-month period and in the second six-month period of each year, with registration cancellation as penalty for failure to do so. Bill passed and signed by the governor.

Nevada. Assembly Bill 55. Proposes for Nevada, the only State now without a fertilizer control law, a general control law requiring guarantees as to nitrogen, available phosphoric acid and soluble potash and such other guarantees as the director may permit. An inspection fee of 30 cents a ton is provided, and a minimum of 18 per cent of plant food is set for superphosphates and mixed fertilizers. The director is ordered to promulgate a list of grades.

Oklahoma. House Bill 83 proposes to exempt from sales tax feed, seed, and fertilizer.

Oregon. Senate Bill 9 would authorize any duly authorized representative of the Department of Agriculture to seize any fertilizer, agricultural mineral or lime which he has cause to believe is for sale in violation of the Act.

South Carolina. Concurrent Resolution House Bill 163. Proposes to request and urge the Fertilizer Board of Control to place the grade 10-0-10 on the approved list of fertilizers for 1947. The President of Clemson College had addressed a letter on February 3 to the Chairman of the House Agriculture Committee reporting on the fertilizer situation and disapproving of this grade.

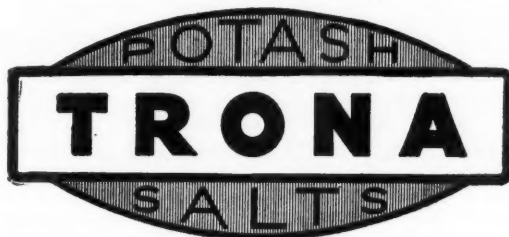
Tennessee. Senate 373 (same as House Bill 496). Would amend the present law by requiring also guarantees as to magnesium, copper, boron and manganese and by providing that a manufacturer may apply for permission to report his tonnages and make payments monthly in lieu of using tax tags. Bill passed and signed by the governor.

Utah. House Bill 33 proposes to amend the present law in the following particulars: (1) unmanipulated animal and fowl manures are exempted; (2) any product to be marketed as "fertilizer" must have the aggregate content of nitrogen, available phosphoric acid, and available potash, 16 per cent or more; (3) a "fertilizer material" must not bear the word "fertilizer" in connection with the brand name or trade mark upon the label; (4) "fertilizer materials" must be guaranteed in whole numbers only as to their content of total nitrogen, total phosphoric acid, available phosphoric acid, available potash, and other nutrients claimed. Bill passed and signed by the governor.

West Virginia. House Bill 237 provides for an extensive amendment and re-enactment of the present fertilizer control law. The follow-

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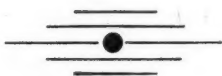




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ing provisions are noted: (1) the minimum percentage of total nitrogen, available phosphoric acid, and soluble potash must be guaranteed; (2) the grade must appear on the end of the packages for identification when piled; (3) an inspection fee of 25 cents a ton is provided, tonnage being reported separately on each six-months' basis; (4) the method of sampling and analysis shall be those adopted as official by the Commissioner; (5) the minimum plant food content of superphosphate is fixed at 18 per cent available phosphoric acid and in mixed fertilizers the sum of the guarantees for nitrogen, available phosphoric acid, and soluble potash must total 20 per cent or more unless 25 per cent or more of the nitrogen is in water insoluble form of plant or animal origin in which case the total plant food need not be more than 18 per cent; (6) the Commissioner, after a public hearing and upon approval by the Director of the Experiment Station, is directed to promulgate a list of grades adequate to meet the agricultural needs of the State and thereafter no other grades shall be eligible for registration, except multiples of the same ratios of these grades may be permitted by the Commissioner. The Commissioner may revise the list of grade not oftener than once each year.

Wyoming. House Bill 66 would amend the control law by requiring that every package of fertilizer should bear a tag or label furnished by the Commissioner of Agriculture at a cost of 1 cent each.

Potato Price Support for 1947 Crops

The United States Department of Agriculture announced on March 13th plans for supporting prices of the 1947 potato crop as required by the Steagall Amendment. Principal emphasis will be placed on measures to assure fullest price support benefits to growers who have complied with acreage goals established for their farms. Important provisions of the program are aimed at diversion of inferior grades and sizes of potatoes from the consumer market and the fullest practicable use of established commercial facilities in the operation of the program.

In an effort to simplify operations of the program and encourage industry cooperation in the orderly marketing of the crop, several significant differences from the 1946 program are (1) participation is limited to growers who have complied with potato acreage goals, (2) loans, while available, no longer will be the principal means of late crop price support, (3) dealer assistance in program operations

is authorized on a contract basis, (4) potatoes acquired under the price support program will be subject to resale in consumer markets at less than support prices, and (5) the Department will assist and encourage the potato industry to utilize its own facilities to maintain orderly marketing and improve the quality offered to consumers by development of marketing agreements and orders in areas to which they are adapted.

The program will require affirmative action by growers to establish their eligibility for participation, and will accomplish price support by purchase, diversion, export, and loans.

The basic conditions of eligibility for price support are as follows: (1) growers must comply with 1947 individual farm potato acreage goals; (2) price support is restricted to potatoes which are produced by eligible growers and which are not objectionable because of disease, insect infestation, frost or other damage; (3) all growers, early and late, will be required to declare the maximum quantity which they expect to offer for price support, and to pay a nominal service fee on potatoes so declared; (4) no grower will be eligible who plants potatoes on land officially designated by a State or Federal agency as unfit for potato production because of disease or insect infestation; (5) growers who plant less than 3 acres, and therefore have no specifically assigned acreage goal, may be required to make their declarations prior to harvest time in order to permit determination of their compliance with the small farm goal; and (6) growers may be required to enter into written agreements with the Department covering such matters as acreage goal compliance, withholding from market and disposition of designated qualities and sizes as directed by the Department, and quantitative limitation of offerings to the Department by appropriate time periods beginning about October 1.

STEDMAN FERTILIZER PLANT EQUIPMENT

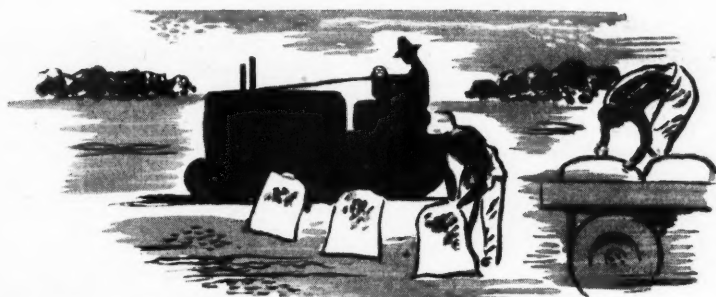
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Chase Bag Centennial

Nineteen forty-seven marks Chase Bag Company's 100th year in the bag business. It was felt that an unusual advertising vehicle should be used to bring this to the attention of their friends, prospects and customers. It was decided to picture dramatic historical events of the last century and have headlines state so many years before these events. For example, "51 Years before Chilkoot Pass Made History . . . Chase Bag was manufacturing Better Bags," "29 Years before Custer's Last Stand . . . Chase was manufacturing Better Bags." These ads will run throughout 1947.

In connection with this centennial Chase has also prepared a complete, colorful booklet. It shows specialties and bags of all kinds: paper, burlap, cotton, and open mesh. Chase features bags of all kinds for every need, and this booklet graphically illustrates them. A copy may be obtained by writing to Chase Bag Co., 309 W. Jackson Boulevard, Chicago, Ill.

Contour Farming Reduces Loss of Plant Food

Liberal fertilization and contour farming of watersheds in fields planted to corn, wheat and legume grasses on the Purdue-Throckmorton farm near LaFayette, Ind., paid dividends by reducing losses of nitrogen, phosphorus and potassium removed by surface water runoff.

A recent report has been made of the study of the conservation system compared with the common practice of farming by the Purdue Agricultural Experiment Station and the Soil Conservation Service, research branch of the U. S. Department of Agriculture. It revealed that corn watershed had been improved through the conservation method even the first year and appreciably so by the fourth year when corn was planted for the second time in the corn, wheat and legume rotation.

In the first year, 1942, watersheds in fields planted to corn receiving six tons of manure, 1,000 pounds of 8-8-8 fertilizer per acre,

plowed under, and contour-drilled with 150 pounds of 2-12-6 fertilizer per acre in the row. The field which was contour cultivated lost only one-fourth as much nitrogen as those that were check-row planted with 150 pounds of 2-12-6 fertilizer per acre in the row. In 1945 the ratio for nitrogen lost was only one to six.

Likewise on the watersheds in wheat fields the following year, liberal fertilization, contour seeding and top-dressing manure reduced nitrogen losses in runoff to a negligible amount.

Phosphate losses in the runoff were four times as great under the common system and followed the nitrogen pattern. Runoff from the common practice watersheds contained as much potassium as was applied in fertilizers in a complete rotation, while the potassium lost from conservation watersheds was one-half that from the untreated watersheds. Ten times more potassium was applied in the rotation for the conservation treatment, but potassium losses by erosion represented only a small part of the amount added in fertilizer under this system.

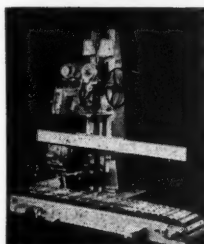
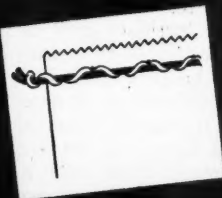
New Jersey Tomato Fertilizer Recommendations

At a meeting of the New Jersey Fertilizer Mixers at Rutgers University, L. G. Schermerhorn in discussing recommendations for 1947 production of tomatoes made the following recommendations with respect to fertilizers: Use 1,000 to 1,500 pounds of a 5-10-10 fertilizer per acre. More fertilizer may be required to replace leaching losses during seasons of excessive rainfall and the use of mixtures other than the above is justified where soil tests indicate abnormally low or high contents of available potash. That part of the total fertilizer to be plowed under will vary with soil types. As much as two-thirds may be profitably plowed under on the heavier soils, whereas little or none should be plowed under on light sandy soil.

At least one side-dressing should be made on heavy soils and two or more on the light sands. No fertilizer should be plowed under on soils having a pH below 5.8. On acid

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soils or those very recently limed, placing part of the fertilizer under the row is satisfactory. One-fourth of the fertilizer may be applied in the row with a fertilizer drill or potato planter a week or 10 days before planting time, and the balance as side-dressings. With this method, a starter solution is unnecessary. The starter solution is recommended generally for plant setting where no fertilizer has already been applied or where the fertilizer was either broadcast and disked into the plowed surface or broadcast and plowed under. A starter solution should not be used when quantities of fertilizer are placed in the rows. A suggested starter solution is 3 pounds of a 13-26-13 or 10-20-10 to 50 gallons of water, using one pint of solution per plant.

King Cotton Stars in New Bemis Motion Picture

The recent St. Louis premiere of the Bemis Bro. Bag Co. film entitled "The King's Other Life" was a huge success. If Motion Picture Academy Awards are in order for industrial presentations this one should be a worthy candidate. About twenty minutes in length, the picture required more than six months to produce. It is 16mm, in full color, with sound.

"King Cotton" is the hero of the movie. It shows cotton moving progressively from the picking in the fields, through the mills where it is processed into yarns, then woven into cotton cloth, and finally fashioned into bags for use by industry. Unique scenes show the additional value in King Cotton's life, when cotton bags are re-used by a thrifty housewife for making wearing apparel and numerous useful items for the home.

Opening the doors of a vast industry about which the majority of people are uninformed, the picture incorporates many beautiful and varied scenes which will appeal to the interests of men, women, and children. There are industrial shots of the complicated batteries of machinery and laboratory devices which hold the attention of the male audience. Scenes showing how the cotton is woven, then designed for dress materials—including sewing and fashion creating, please the women. A

melodious background of music combined with many colorful views make the film attractive to children as well as grown-ups.

The new Bemis picture was filmed by The Calvin Company of Kansas City, one of the foremost industrial motion picture producers in the United States. Prints and projectors have been distributed to the numerous Bemis sales offices for presentations throughout the nation. All companies or groups interested in viewing the film are invited to contact their nearest Bemis representative, or write directly to the Bemis General Office, 408 Pine Street, St. Louis, Mo., and suitable scheduling will be arranged.

The Value of Soil Organic Matter

In a talk at the Fifth Annual Conference on Conservation, Nutrition, and Health at Ohio University, Emil Truog, Professor of Soils at the University of Wisconsin, evaluated the importance of organic matter in the soil, in part as follows: "Much ado is being made today about the great importance of soil organic matter in relation to soil fertility, soil conservation, and crops of satisfactory nutritive value. This, in part, is as it should be, because soil organic matter is of tremendous importance. It facilitates the intake of water and thus reduces runoff and erosion. It also favors workability or ease of cultivation, aeration, and drainage. Fresh organic matter contains all of the elements needed for plant growth.

"However, to say that chemical fertilizer such as superphosphate and muriate of potash should not be used to make up inevitable deficiencies of nutrient elements that cannot be supplied through the use of organic matter is just pure bunkum. Absolutely no evidence exists to the effect that the judicious use of mineral fertilizers is at all injurious to soils or tends to produce crops which are unsatisfactory as feed for animals or food for man. In fact, evidence almost without end now exists showing clearly that the use of mineral fertilizers on depleted soils promotes the growth of crops which have superior nutritive values."

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Nitrogen Increases Bluegrass Seed Yield

Spring application of nitrogen tripled bluegrass seed yields in tests made by the University of Kentucky Experiment Station in central counties in the Bluegrass region last year. Where 125 pounds of ammonium nitrate were spread to the acre, seed production averaged 44.6 pounds, compared to 13.5 pounds where no nitrogen was used.

Applying nitrogen in the fall brought only 21.3 pounds of seed to the acre.

Nitrogen applied in the spring also increased the amount of early grazing, and probably added to the value of the pasture after the seed was stripped.

Flooded lands of Holland are being put in growing condition by the use of gypsum which seems to counteract the ill effects of salt water. More than 110 million pounds of gypsum were imported by Holland in 1946 and orders were placed for about 500 million pounds more for 1946.

INDUSTRY ADVISORY COMMITTEE

(Continued from page 9)

production of 781,027 tons of K_2O , the total potash apparently available for the fertilizer year 1946-47 is 797,527 tons of K_2O for Continental United States, Puerto Rico, and Hawaii.

Current Fertilizer Problems

L. B. Taylor of U. S. D. A. reported on current problems involving critical areas and transportation as follows:

"The demand for all fertilizers is in excess of the supply. The most acute problems are with respect to supplies of nitrogenous fertilizers. There is no section of the country which, generally, has a satisfactory supply of nitrogen fertilizers, according to the requests we receive. In other words, it is a nation-wide problem and all areas could use greater amounts than are available. The supply of nitrogen for direct application is the problem on which we have the most complaints. Supplies of mixed fertilizer seem to be more adequate. Even though our exports are less than 10 per cent of the domestic supply they are reported as the major cause of present problems. Judging from the volume of correspondence the situation is most serious in the Southeast and the South Central States. The problems at present appear to be supplies of nitrogen for direct

application on small grains in Southern States, sugar beets and rice in California, and fruit trees in the North Central and Middle Atlantic States. Delayed shipments of Chilean nitrate, together with distribution of ammonium nitrate through new distribution channels, have contributed to this problem.

"The principal suggestions for meeting these situations are to time shipments of solid nitrogenous materials to those areas where immediate application is necessary, and to supply as large a quantity of the solid nitrogen materials for direct application as possible.

Transportation

"Three principal problems of transportation have confronted fertilizer movements this spring:

- "1. Ships for movement of Chilean nitrate of soda.
- "2. Tank cars for movement of anhydrous ammonia, ammonia solutions, and sulphuric acid.
- "3. Box cars for movement of potash, phosphate rock, and mixed fertilizer.

"Adequate ships have been made available for movement of Chilean nitrate of soda. Bad weather delayed loadings and other unforeseen difficulties have held up deliveries. The Maritime Commission and the Chilean Nitrate Corporation have been doing everything possible to expedite the deliveries of Chilean nitrate of soda. Tank cars have been maintained for the movement of anhydrous ammonia and ammonia solutions for the production of nitrogen fertilizers for the domestic program. The Army program was reduced and absorbed the shortage in tank cars. Tank cars for the movement of sulphuric acid from Alabama Ordnance Works

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have not been available. However, the Army has been instructed to place such cars at the disposal of the Tennessee Corporation in exchange for petroleum cars to be conditioned for the hauling of ammonium nitrate water. Box cars are very short. The movement of potash and phosphate rock has been on a hand-to-mouth basis and larger quantities of these materials could have been moved had more cars been made available. The Office of Defense Transportation and the Association of American Railroads are fre-

gram for Ordnance. Some industry members present indicated that industry would take over and operate one or more such units on a commercial basis if such units are made available for lease or purchase. Mr. Minor significantly stated that the Department of Agriculture did not want the Government operating such facilities and asked the Committee for its comments on the probable need for fertilizer nitrogen in the United States and its possessions for 1947-48. Opinions expressed by Committee members

TABLE V.
Production, Supply and Disposition of Ammonium Nitrate Available in United States, 1946-47
(Tons Material)

Period	Production	Army Return	Total Available	Exports	Army Borrowings	Domestic		
						Total	Continental	Insular
1946								
July-Sept.	158,928	..	158,928	16,539	38,384	104,005	96,531	7,474
Oct.-Dec.	161,226	..	161,226	4,000	71,336	85,890	79,590	6,300
1947								
Jan.-March.	143,053 ²	54,860	197,913	73,000	..	124,913	116,913	8,000
Apr.-June.	143,053 ²	54,860	197,913	66,083	—	131,830	121,420	10,410
Total.	606,260	109,720	715,980	159,622 ³	109,720	446,638	414,454	32,184

¹ Includes quantity imported from Canada.

² The production for 1947 is estimated. Assumes same production of domestic plants in first six months of 1947 as was obtained in last six months of 1946 and the balance of Canadian imports divided equally between the two quarters.

³ Equivalent tonnage of nitrogen . . . 51,877 tons.

NOTE: Ammonium phosphate from Houston, Texas and ammonium sulphate from Salem, Oregon account for practically all of the other nitrogen exports over and above those normally made to Latin-American Republics and to the Philippines.

quently contacted to prevent stoppages in the movement of these materials, which are needed by fertilizer mixers in order to carry out the program.

"The best recommendation on the car situation is:

- "1. Load cars to capacity.
- "2. Load and unload cars as rapidly as possible.
- "3. Use other forms of transportation where available."

W. F. Watkins of U. S. D. A. presented a tabulation of accomplishments and estimates of ammonium nitrate distribution. His figures are given in Table V.

W. A. Minor of the U. S. D. A. discussed a program for the utilization of nitrogen production facilities now owned by Government. Mr. Minor indicated the possible need for conversion for fertilizer nitrogen production by industry of at least some of the plants now being operated under the Army pro-

gram for Ordnance. Some industry members present indicated that industry would take over and operate one or more such units on a commercial basis if such units are made available for lease or purchase. Mr. Minor significantly stated that the Department of Agriculture did not want the Government operating such facilities and asked the Committee for its comments on the probable need for fertilizer nitrogen in the United States and its possessions for 1947-48. Opinions expressed by Committee members

Results for a survey on plant food needs in the next few years were studied, but the U. S. D. A. has decided not to release the figures for general distribution pending further consideration and study. It was indicated by some industry spokesman that perhaps some of the reporting states had inflated their figures, hoping in some way thereby to secure a greater share of scarce materials. The figures are being returned to the separate states by U. S. D. A. for rechecking.

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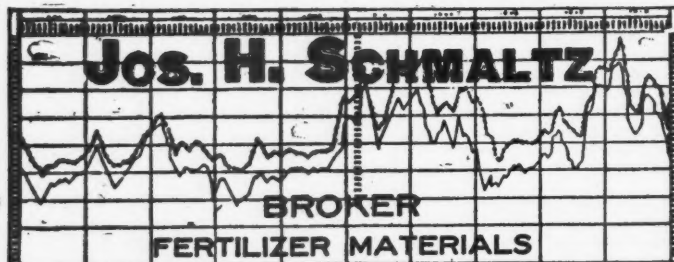
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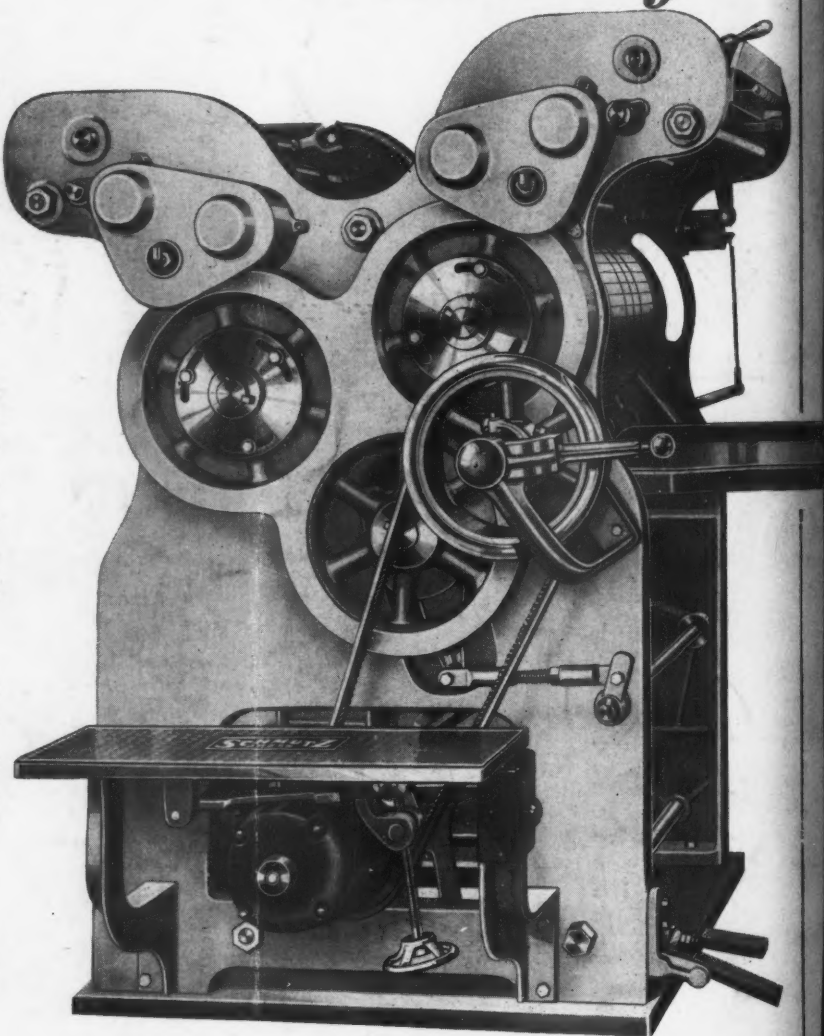
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